

IN THE CLAIMS

Please amend the claims as follows:

1(Amended). A machine for inspecting the wall of a bottle comprising

a conveyor for supporting a bottle at an inspection station, the inspection station including

a CCD camera on one side of the conveyor having a camera image,

a light source, having an illumination area, on the other side of the conveyor, for imaging the bottle on said CCD camera image [means],

means for defining on said illumination area [a spatially cyclically continuously varying] light intensit[y]ies varying between a minimum brightness level that will permit the identification of a light blocking defect [therebehind] and a maximum brightness level, [light on said light source illumination area] the brightness level varying spatially, cyclically, and continuously at a rate of change which is less than [that required to be] a rate of change that would be identified [detected] as a defect,

computer means for analyzing said camera image by comparing neighboring pixels [(one or more away) alone or in combination] to determine the rate of change in [intensity] brightness level to identify defects where the rate of change exceeds a defined value.

3(Amended). A machine for inspecting the wall of a bottle according to claim 2, wherein said plurality of L.E.D. rows define a plurality of row groups each including a [light] row having a maximum brightness level [at one side], a row having a minimum brightness level, at least one row intermediate said [white] row having said maximum brightness level and said row having said

minimum brightness level [rows] having a[n intensity] brightness level between said minimum brightness level and [white] said maximum brightness level, and at least one row on the side of [said minimum brightness] the row having the minimum brightness level remote from said [white] row having the maximum brightness level having a[n intensity] brightness level between the minimum brightness level and [white] the maximum brightness level.

4 (Amended). A machine for inspecting the profile and wall of a bottle according to claim 3, wherein there are a plurality of vertical L.E.D. rows intermediate the row having the minimum brightness level and [white] the row[s] having the maximum brightness level and the [intensity] brightness level of said plurality of intermediate rows uniformly reduces from the [white] row having the maximum brightness level to the [minimum brightness] row having the minimum brightness level.

5 (Amended). A machine for inspecting the profile and wall of a bottle according to claim 4, wherein there are a plurality of vertical L.E.D. rows on the side of said row having the minimum brightness level [row] remote from said [white] row having the maximum brightness level and the [intensity] brightness level of said plurality of said rows on the side of said row having the minimum brightness level [row] remote from said [white] row having the maximum brightness level uniformly increas[e]ing in [intensity] brightness level proceeding away from the row having the minimum brightness level [row].

6 (Amended). A machine for inspecting the profile and wall of a bottle according to claim 5, wherein [said] the row having the minimum brightness level [row] has a brightness level of about 20% of the maximum brightness level and wherein each of said vertical L.E.D. row groups has three vertical rows intermediate [said] the row having the minimum brightness level and [white rows] the row

having the maximum brightness level, with the [intensity of the] row adjacent the row having the minimum brightness level [row] having a[n intensity] brightness level of about 40% of the [white row] maximum brightness level and the [intensity of the] row adjacent the [white] row having the maximum brightness level having a[n intensity] brightness level of about 80% of the [white row] maximum brightness level and the [intensity of the] intermediate of the three vertical rows intermediate the row having the minimum brightness level [row] and the [white] row[s] having the maximum brightness level having a[n intensity] brightness level of about 60% of the [white row] maximum brightness level.

7 (Amended). A machine for inspecting the profile and wall of a bottle according to claim 6, wherein each of said vertical L.E.D. row groups has three vertical rows on the side of [said] the row having the minimum brightness level [row] remote from [said white] the row having the maximum brightness level, with the [intensity of the] row adjacent the row having the minimum brightness level [row] remote from the row having the maximum brightness level having a[n intensity] a brightness level of about 40% of the [white row] maximum brightness level and the [intensity of the] next of the three vertical rows on the side of the row having the minimum brightness level remote from the row having the maximum brightness level having a[n intensity] brightness level of about 60% of the [white row] maximum brightness level and the [intensity of] the last of the three vertical rows on the side of the row having the minimum brightness level remote from the row having the maximum brightness level [remote from the minimum brightness row] having a[n intensity] brightness level of about 80% of the [white row] maximum brightness level.